

**Amendments To The Specification:****Please amend the paragraph beginning at line 20 on page 3 as follows:**

In order to achieve the aforementioned object, the present invention provides a polishing composition. The polishing composition is a polishing composition for use in polishing for forming the wiring in a semiconductor device and contains colloidal silica, an acid, an anticorrosive, ~~a complete saponified~~ polyvinyl alcohol having a saponification degree of 98.0% by mole or more, and water.

**Please amend the paragraph beginning at line 4 on page 4 as follows:**

The present invention further provides another polishing method. The polishing method includes removing a part of the portion of the conductive layer positioned outside the trench by chemical mechanical polishing to expose the upper surface of the barrier layer, and removing the remaining part of the portion of the conductive layer positioned outside the trench and the portion of the barrier layer positioned outside the trench by chemical mechanical polishing to expose the upper surface of the insulating layer. A first polishing composition is used in the chemical mechanical polishing to remove the portion of the conductive layer positioned outside the trench. A second polishing composition is used in the chemical mechanical polishing to remove the remaining part of the portion of the conductive layer positioned outside the trench and the portion of the barrier layer positioned outside the trench. The first polishing composition contains a surfactant, a silicon oxide, a carboxylic acid, an anticorrosive, an oxidizing agent and water. The second polishing composition contains colloidal silica, an acid, an anticorrosive, ~~a complete saponified~~ polyvinyl alcohol having a saponification degree of 98.0% by mole or more, and water. The surfactant includes at least one selected from the compounds represented by general formulae (1) to (7) and salts thereof.

**Please amend the paragraph beginning at line 1 on page 6 as follows:**

The present invention provides still another polishing method. In the polishing method, the first polishing composition used in the chemical mechanical polishing to remove a part of the portion of the conductive layer positioned outside the trench contains an  $\alpha$ -amino acid, a benzotriazole derivative, a silicon oxide, a surfactant, an oxidizing agent and water. The second polishing composition used in the chemical mechanical polishing to remove the remaining part of the portion of the conductive layer positioned outside the trench and the portion of the barrier layer positioned outside the trench contains colloidal silica, an acid, an anticorrosive, ~~a complete saponified polyvinyl alcohol~~ having a saponification degree of 98.0% by mole or more, and water. The benzotriazole derivative is represented by the general formula (8):

**Please amend the paragraph beginning at line 9 on page 16 as follows:**

The benzotriazole derivative represented by the general formula (28) in which  $R^{14}$  is an alkyl having a hydroxy group and a tertiary amino group includes a compound represented by the general formula (31). Specific examples of the compound represented by the general formula (31) include 1-[N,N-bis(hydroxydimethyl)(hydroxyethyl)aminomethyl]benzotriazole represented by the chemical formula (32).

**Please amend the paragraph beginning at line 16 on page 17 as follows:**

The first polishing composition may contain two or more kinds of the anticorrosives. Among the aforementioned anticorrosives, 1-[N,N-bis(hydroxydimethyl)(hydroxyethyl)aminomethyl]benzotriazole represented by the chemical formula (32) is most preferable because of the particularly strong effect for protecting the surface of the conductive layer 15.

**Please amend the paragraph beginning at line 2 on page 18 as follows:**

The content of the anticorrosive in the first polishing composition is preferably 0.1% by mass or less. When the anticorrosive is benzotriazole, the content of the anticorrosive in the first polishing composition is preferably 0.000001 to 0.001% by mass, and more preferably 0.00003 to 0.0005% by mass. When the anticorrosive is 1-[N,N-bis(hydroxydimethyl)(hydroxyethyl)aminomethyl]benzotriazole, the content of the anticorrosive in the first polishing composition is preferably 0.00005 to 0.005% by mass, and more preferably 0.0001 to 0.001% by mass. When the anticorrosive is 1-(2,3-dihydroxypropyl)benzotriazole, the first polishing composition has preferably an anticorrosive content of the anticorrosive in the first polishing composition is preferably 0.001 to 0.1% by mass, and more preferably 0.003 to 0.05% by mass. When the anticorrosive is 1-(1,2-dicarboxyethyl)benzotriazole, the content of the anticorrosive in the first polishing composition is preferably 0.0005 to 0.01% by mass, and more preferably 0.002 to 0.08% by mass.

**Please amend the paragraph beginning at line 31 on page 19 as follows:**

The second polishing composition used in the chemical mechanical polishing of the second polishing step comprises a component (g) comprised of colloidal silica, a component (h) comprised of an acid, a component (i) comprised of an anticorrosive, a component (j) comprised of a completely saponified polyvinyl alcohol having a saponification degree of 98.0% by mole or more, and a component (k) comprised of water.

**Please amend the paragraph beginning at line 3 on page 23 as follows:**

The benzotriazole derivative represented by the general formula (38) in which R<sup>1</sup> is an alkyl group having a hydroxy group and a tertiary amino group includes a compound represented by the general formula (41). Specific examples of the compound represented by the general formula (41) include, for example, 1-[N,N-bis(hydroxydimethyl)(hydroxyethyl)aminomethyl]benzotriazole represented by the chemical

formula (42).

**Please amend the paragraph beginning at line 8 on page 24 as follows:**

The second polishing composition may contain two or more kinds of anticorrosives. Among the aforementioned anticorrosives, 1-[N,N-bis(hydroxydimethyl)(hydroxyethyl)aminomethyl]benzotriazole represented by the chemical formula (42) is the most preferable because of its particularly strong effect for protecting the surface of the conductive layer 15.

**Please amend the paragraph beginning at line 4 on page 25 as follows:**

The component (j), that is, ~~the completely saponified~~ polyvinyl alcohol having a saponification degree of 98.0% by mole or more has an effect for inhibiting the occurrence of a difference in level on the surface of the object to be polished after polishing by using the second polishing composition. ~~The completely saponified polyvinyl alcohol is a polyvinyl alcohol which can be prepared by saponifying (hydrolyzing) polyvinyl acetate and has a saponification degree of 98.0% by mole or more. The completely saponified polyvinylalcohol has generally a molecular weight of about 10000 to 500000, and preferably 100000 or less because of good solubility in water.~~

**Please amend the paragraph beginning at line 12 on page 25 as follows:**

The content of the completely saponified polyvinyl alcohol in the second polishing composition is preferably 0.001 to 1.0% by mass, and more preferably 0.005 to 0.5% by mass. If the content of the ~~completely saponified~~ polyvinyl alcohol is less than 0.001% by mass and more than 1.0% by mass, there is a possibility that the depth of dishing will be increased. The second polishing composition is improved in ability to polish the conductive layer 15 in proportion with increased content of the ~~completely saponified~~ polyvinyl alcohol.

**Please amend the paragraph beginning at line 7 on page 27 as follows:**

The depth of dishing and the depth of erosion at the end of the second polishing step are reduced due to the effects of ~~the completely saponified~~ polyvinyl alcohol having a saponification degree of 98.0% by mole or more in the second polishing composition. Therefore, according to the second polishing composition, the occurrence of dishing and erosion are inhibited during the second polishing step. In addition, the second polishing composition is excellent in ability to polish the barrier layer 14 due to the effects of the colloidal silica and the acid. It is assumed that ~~the completely saponified~~ polyvinyl alcohol having a saponification degree of 98.0% by mole or more can weaken adequately the ability of the second polishing composition for polishing the object to be polished, thereby inhibiting the occurrence of dishing and erosion which causes a difference in surface levels. A partially saponified polyvinyl alcohol does not possess the effect for inhibiting the occurrence of dishing and erosion, such effect being inherent in ~~the completely saponified~~ polyvinyl alcohol having a saponification degree of 98.0% by mole or more.

**Please amend the paragraph beginning at line 19 on page 27 as follows:**

At the end of the first polishing step, in some cases, there remains a portion of the conductive layer 15 positioned outside the trench 13 in a large amount. In such a case, it is necessary, in chemical mechanical polishing of the second polishing step, to remove not only the barrier layer 14 but also the largely remaining conductive layer 15. As mentioned above, the second polishing composition is improved in ability to polish the conductive layer 15 in proportion with increased content of ~~the completely saponified~~ polyvinyl alcohol having a saponification degree of 98.0% by mole or more. Therefore, the second polishing composition is regulated in content of ~~the completely saponified~~ polyvinyl alcohol having a saponification degree of 98.0% by mole or more in accordance with the amount of the remaining portion of the conductive layer 15 positioned outside the trench 13 at the end of the first polishing step, allowing favorable chemical mechanical polishing in the second polishing step.

**Please amend the paragraph beginning at line 32 on page 28 as follows:**

The component (B), that is, the benzotriazole derivative is represented by the aforementioned general formula (28). The benzotriazole derivative has an effect for protecting the copper-containing metal from corrosion caused by the oxidizing agent, thereby preventing the surface of the conductive layer 15 from corrosion. In addition, the anticorrosive has an effect for inhibiting excess polishing of the conductive layer 15, thereby inhibiting occurrence of dishing. Specific examples of the benzotriazole derivative are, for example, the compounds represented by the aforementioned general formula (29) including 1-(1,2-dicarboxyethyl)benzotriazole, the compounds represented by the aforementioned general formula (31) including 1-[N,N-bis(hydroxydimethyl)(hydroxyethyl)aminomethyl]benzotriazole, and the compounds represented by the aforementioned general formula (33) or (34) including 1-(2,3-dihydroxypropyl)benzotriazole and 1-(hydroxymethyl)benzotriazole.

**Please amend the paragraph beginning at line 31 on page 31 as follows:**

The second polishing composition may be used in the chemical mechanical polishing of the first polishing step. In this case, the second polishing composition has preferably a content of completely saponified polyvinyl alcohol having a saponification degree of 98.0% by mole or more content of 0.005% by mass or more, and more preferably 0.01% by mass or more. The second polishing composition having a completely saponified polyvinyl alcohol content set as mentioned above is improved in ability to polish the copper-containing metal (conductive layer 15).

**Please amend the paragraph beginning at line 34 on page 32 as follows:**

A copper patterned wafer was polished by using a polishing slurry, "PLANERLITE-7102," available from FUJIMI INCORPORATED under the second polishing conditions. The copper patterned wafer is a copper patterned wafer with a 1000 nm thick copper layer (854 mask pattern) available from SEMTECH SEMATECH Co. Ltd., and has a 800 nm deep initial recess 16. The polishing was terminated at the time when the copper layer of the copper patterned wafer

was polished to a 70% reduction in thickness. This process corresponds to the chemical mechanical polishing process of the first sub step in the first polishing step. Next, the copper patterned wafer subjected to the chemical mechanical polishing process of the first sub step was polished by using each of the first polishing compositions in accordance with Examples 1 to 31 and Comparative Examples 1 to 11 under the first polishing conditions. The barrier layer 14 thus polished, the upper surface of which was detected to expose itself by an indicating endpoint, was additionally polished for another period of time necessary to polish out a 200 nm thick copper layer, followed by finishing the polishing. This process corresponds to the chemical mechanical polishing process of the second sub step in the first polishing step. Thereafter, a region with 100  $\mu\text{m}$  wide wiring 17 formed thereon was measured for the depth of dishing. The depth of dishing was measured by using a contact type surface measuring apparatus of profiler, "HRP340", available from KLA ~~Tencor-Teneol~~ Co. The results of the measurement are shown in the column entitled "Depth of dishing" of Table 1 and Table 2. In the column, "-" (hyphen) represents the fact that the depth of dishing could not be measured because the wafer was not polished.

**Please amend the paragraph beginning at line 21 on page 33 as follows:**

With respect to the copper patterned wafer subjected to the chemical mechanical polishing processes of the first sub step and the second sub step, copper-containing metal remaining on the region of the insulating layer 12 with no wiring 17 formed thereon was measured for the amount remaining. The amount of the copper-containing metal left was measured by using a differential interference microscope "OPTIPHOTO300" available from NIKON Co. Ltd. On the basis of the thus measured amount of the copper-containing metal left, each of the first polishing compositions in accordance with Examples 1 to 31 and Comparative Examples 1 to 11 was evaluated based on four levels: Excellent ( $\bigcirc\bigcirc$ )( $\oplus$ ), Good ( $\bigcirc$ )( $\ominus$ ), Pass ( $\Delta$ ) and Poor ( $\times$ ). Namely, a case where no copper-containing metal was found left was evaluated as Excellent, a case where a spotted copper-containing metal was found slightly left was evaluated as Good, a case where a spotted copper-containing metal was found left throughout was evaluated as Pass, and a case where too large amount of the copper-containing metal was found left to confirm wiring was evaluated as Poor. The results of the evaluation are shown in the column entitled "Amount of copper-

containing metal left” of Table 1 and Table 2.

**Please amend the paragraph beginning at line 12 on page 34 as follows:**

The copper blanket wafers were polished under the first polishing conditions by using the first polishing compositions in accordance with Examples 1 to 31 and Comparative Examples 1 to 11 immediately after preparation and the first polishing compositions in accordance with Examples 1 to 31 and Comparative Examples 1 to 11 after storing in a closed container for a while after preparation, respectively. Each polishing rate was calculated from the thickness of the wafer before and after the polishing, and on the basis of degree of lowering by the storage in polishing rate of each first polishing composition, a pot life for each of the first polishing compositions in accordance with Examples 1 to 31 and Comparative Examples 1 to 11 was evaluated based on four levels: Excellent ( $\bigcirc\bigcirc$ )( $\oplus$ ), Good ( $\bigcirc$ )( $\ominus$ ), Pass ( $\Delta$ ) and Poor ( $\times$ ). Namely, a case where the polishing rate provided by the first polishing composition stored for two weeks or more was larger than 90% of the polishing rate provided by the first polishing composition immediately after preparation was evaluated as Excellent, a case where the polishing rate provided by the first polishing composition stored for one week or more and less than two weeks was less than 90% of the polishing rate provided by the first polishing composition immediately after preparation was evaluated as Good, a case where the polishing rate provided by the first polishing composition stored for three days or more and less than one week was less than 90% of the polishing rate provided by the first polishing composition immediately after preparation was evaluated as Pass, and a case where the polishing rate obtained by the first polishing composition stored for less than three days is less than 90% of the polishing rate provided by the first polishing composition immediately after preparation was evaluated as Poor. The results of the evaluation are shown in the column entitled “Pot life” of Table 1 and Table 2.

**Please amend Table 1 on page 35 as follows:**



Table 1

	Surfactant (Mass percentage)		Silicon oxide (Mass percentage)	Carboxylic acid (Mass percentage)	Anticorrosive (Mass percentage)	Oxidizing agent (Mass percentage)	pH	Stock removal rate (nm/min.)	Depth of etching (nm)	Amount of copper- containing metal left	Pot life
Ex. 1	A1 0.01%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	800	100	○○○	△
Ex. 2	A1 0.02%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	600	20	○	△
Ex. 3	A1 0.05%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	400	10	△	△
Ex. 4	A1 0.1%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	300	5	△	△
Ex. 5	A1 0.02%	D 0.005%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	800	100	○	△
Ex. 6	A1 0.02%	D 0.05%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	500	15	△	△
Ex. 7	A1 0.02%	D 0.1%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	400	10	△	△
Ex. 8	A1 0.035%	-	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	450	20	○	△
Ex. 9	A1 0.025%	D 0.01%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	600	20	△	△
Ex. 10	A1 0.015%	D 0.02%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	700	60	△	△
Ex. 11	A1 0.005%	D 0.03%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	800	100	○	△
Ex. 12	A2 0.02%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	600	20	○	△
Ex. 13	A3 0.02%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	600	20	○	△

Ex. 14	B1 0.02%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	400	40	○	○
Ex. 15	B2 0.02%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	800	100	○○□	△□
Ex. 16	B2 0.12%	D 0.05%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	600	30	○	△□
Ex. 17	C1 0.02%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	800	100	○	△□
Ex. 18	C1 0.06%	D 0.06%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	600	30	○	△□
Ex. 19	C2 0.02%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	800	100	○	△□
Ex. 20	C2 0.09%	D 0.06%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	700	30	○	△□
Ex. 21	A1 0.02%	E 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	700	50	○○□	△□
Ex. 22	A1 0.02%	D 0.015%	CS1 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	550	15	△□	△□
Ex. 23	A1 0.02%	D 0.015%	CS3 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	650	50	△□	△□
Ex. 24	A1 0.02%	D 0.015%	FS3 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	600	45	○	△□
Ex. 25	A1 0.02%	D 0.015%	CS2 0.5%	Gly 1%	G 0.01%	APS 1%	9.5	800	50	○	△□
Ex. 26	A1 0.02%	D 0.015%	CS2 0.5%	Val 1%	G 0.01%	APS 1%	9.5	400	15	△□	△□
Ex. 27	A1 0.02%	D 0.015%	CS2 0.5%	Cit 1%	G 0.01%	APS 1%	9.5	900	120	○	△□

Please amend Table 2 on page 36 as follows:

Table 2

	Surfactant (Mass percentage)		Silicon oxide (Mass percentage)	Carboxylic acid (Mass percentage)	Anticorrosive (Mass percentage)	Oxidizing agent (Mass percentage)	pH	Stock removal rate (nm/min.)	Depur or rinsing (nm)	Amount of copper- containing metal left	Pot life
Ex. 28	A1 0.02%	D 0.015%	CS2 0.5%	Oxa 1%	G 0.01%	APS 1%	9.5	400	120	○	<u>△</u> ≡
Ex. 29	A1 0.02%	D 0.015%	CS2 0.5%	Ala 1%	H 0.0005%	APS 1%	9.5	600	20	○	<u>△</u> ≡
Ex. 30	A1 0.02%	D 0.015%	CS2 0.5%	Ala 1%	I 0.005%	APS 1%	9.5	600	20	○	<u>△</u> ≡
Ex. 31	A1 0.02%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	HPO 1%	9.5	300	100	○	○
C.Ex. 1	-	-	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	1000	250	○	<u>△</u> ≡
C.Ex. 2	-	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	800	150	○	<u>△</u> ≡
C.Ex. 3	-	E 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	800	150	○	<u>△</u> ≡
C.Ex. 4	-	F 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	800	150	○	<u>△</u> ≡
C.Ex. 5	A1 0.02%	D 0.015%	-	Ala 1%	G 0.01%	APS 1%	9.5	40	-	×	<u>△</u> ≡
C.Ex. 6	A1 0.02%	D 0.015%	CS2 0.5%	-	G 0.01%	APS 1%	9.5	300	200	○	<u>△</u> ≡
C.Ex. 7	A1 0.02%	D 0.015%	CS2 0.5%	Ala 1%	-	APS 1%	9.5	900	450	<u>○○</u> ≡	<u>△</u> ≡
C.Ex. 8	A1 0.02%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	-	9.5	20	-	×	<u>○○</u> ≡

C.Ex. 9	E 0.02%	F 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	800	450	○○□	△□
C.Ex. 10	E 0.02%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	900	150	○○□	△□
C.Ex. 11	F 0.02%	D 0.015%	CS2 0.5%	Ala 1%	G 0.01%	APS 1%	9.5	1000	150	○○□	△□

**Please amend the paragraph beginning at line 15 on page 38 as follows:**

A copper patterned wafer (854 mask pattern) available from SEMATECH SEMTECH Co. Ltd. was polished by using a polishing slurry, “PLANERLITE-7102”, available from FUJIMI INCORPORATED under the aforementioned second polishing conditions. The polishing was terminated at the time when the thickness of the copper layer of the copper patterned wafer after polishing was 70% of the thickness of the copper layer of the copper patterned wafer before polishing. This process corresponds to the chemical mechanical polishing process of the first sub step in the first polishing step. Next, the copper patterned wafer subjected to the chemical mechanical polishing process of the first sub step was polished by using the first polishing composition in accordance with Example 2 under the aforementioned first polishing conditions. The barrier layer 14 thus polished, the upper surface of which was detected to expose itself by an indicating endpoint, was additionally polished for another period of time necessary to polish out a 200 nm thick copper layer, followed by finishing the polishing. This process corresponds to the chemical mechanical polishing process of the second sub step in the first polishing step. Subsequently, the copper patterned wafer subjected to the chemical mechanical polishing process of the second sub step was polished by using each of the second polishing compositions in accordance with Examples 32 to 72 and Comparative Examples 12 to 26 under the third polishing conditions. This process corresponds to the chemical mechanical polishing process of the second sub step in the second polishing step. At the end of the second sub step and the end of the second polishing step, a region with a 100  $\mu\text{m}$  wide wiring 17 formed was measured for the depth of dishing. The depth of dishing was measured by using a contact type surface measuring apparatus of profiler, “HRP340”, available from KLA-Tencor Tencor Co. On the basis of difference

calculated by taking out the depth of dishing measured at the end of the second polishing step from the depth of dishing measured at the end of the second sub step, each of the second polishing compositions in accordance with Examples 32 to 72 and Comparative Examples 12 to 26 were evaluated based on four levels: Excellent (○○)(≡), Good (○)(Θ), Pass (Δ) and Poor (×). Namely, a case where the difference was 0 nm or more was evaluated as Excellent, a case where the difference was from -10 nm or more and less than 0 nm was evaluated as Good, a case where the difference was from -20 nm or more and less than -10 nm was evaluated as Pass, and a case where the difference was less than -20 nm was evaluated as Poor. The results of the evaluation are shown in the column entitled "Surface difference" of Table 3 to Table 5.

**Please amend the paragraph beginning at line 24 on page 39 as follows:**

The copper patterned wafer subjected to the chemical mechanical polishing process of the second polishing step as mentioned above, the copper blanket wafer polished by using each of the second polishing compositions in accordance with Examples 32 to 72 and Comparative Examples 12 to 26 under the third polishing conditions and a silicon dioxide blanket wafer were prepared. The copper blanket wafer was prepared by forming a copper layer on an 8 inch silicon wafer by electrolytic plating. The silicon dioxide blanket wafer was prepared by forming a silicon dioxide layer on an 8 inch silicon wafer by CVD method by using TEOS as a starting material. The prepared wafers were cleaned in pure water by ultrasonic cleaning (40 kHz) for one minute, and additionally scrub-cleaned with pure water to which a cleaning agent "SD3000" available from MITSUBISHI Chemical Co. Ltd. was added. The wafers after cleaned were rinsed with pure water, and then spin-dried. Particles (foreign substances) having a size of not less than 0.25 μm existing on the copper patterned wafer after polishing were counted in number by using a wafer defect detecting apparatus with dark-field pattern "AIT III" available from KLA ~~Tencor~~ Tencor Co. Further, particles (foreign substances) having a size of not less than 0.25 μm existing on the copper blanket wafer and the silicon dioxide blanket wafer after polishing were counted in number by using a wafer surface foreign substance detecting apparatus without pattern "SP1SPI-TBI" available from KLA ~~Tencor~~ Tencor Co., respectively. On the basis of the thus counted number of particles on each of the wafers, each of the second polishing compositions in accordance with

Examples 32 to 72 and Comparative Examples 12 to 26 were evaluated based on four levels: Excellent (○○)(≡), Good (○)(Θ), Pass (Δ) and Poor (×). Namely, a case where the number of particles counted on the copper patterned wafer was not more than 600, the number of particles counted on the copper blanket wafer was not more than 250, and the number of particles counted on the silicone dioxide blanket wafer was not more than 100 was evaluated as Excellent, a case where the number of particles counted on the copper patterned wafer was not less than 601 and not more than 1000, the number of particles counted on the copper blanket wafer was not less than 251 and not more than 500, and the number of particles counted on the silicone dioxide blanket wafer was not less than 101 and not more than 200 was evaluated as Good, a case where the number of particles counted on the copper patterned wafer was not less than 1001 and not more than 2000, the number of particles counted on the copper blanket wafer was not less than 501 and not more than 1000, and the number of particles counted on the silicone dioxide blanket wafer was not less than 201 and not more than 400 was evaluated as Pass, and a case where the number of particles counted on the copper patterned wafer was not less than 2001, the number of particles counted on the copper blanket wafer was not less than 1001, and the number of particles counted on the silicone dioxide blanket wafer was not less than 401 was evaluated as Poor. The results of the evaluation are shown in the column entitled "Cleaning property" of Table 3 to Table 5.

**Please amend the paragraph beginning at line 27 on page 40 as follows:**

One hundred particles were randomly selected from those on the copper patterned wafer, the copper blanket wafer and the silicon dioxide blanket wafer after cleaning and drying. The selected particles were analyzed as to whether they correspond to surface defects of the wafer or not. The number of particles corresponding to surface defects in the selected 100 particles was calculated by percentage. On the basis of the thus calculated percentage, each of the second polishing compositions in accordance with Examples 32 to 72 and Comparative Examples 12 to 26 were evaluated based on four levels: Excellent (○○)(≡), Good (○)(Θ), Pass (Δ) and Poor (×). Namely, a case where the percentage of the number of particles corresponding to surface defects was less than 5% was evaluated as Excellent, a case where the percentage was not less than 5%

and less than 10% was evaluated as Good, a case where the percentage was not less than 10% and less than 20% was evaluated as Pass, and a case that the percentage was not less than 20% was evaluated as Poor. The results of the evaluation are shown in the column entitled "Surface defect" of Table 3 to Table 5.

**Please amend the paragraph beginning at line 6 on page 41 as follows:**

The silicon dioxide blanket wafers were polished under the third polishing conditions by using the second polishing compositions in accordance with Examples 32 to 72 and Comparative Examples 12 to 26 immediately after preparation and the second polishing compositions in accordance with Examples 32 to 72 and Comparative Examples 12 to 26 after storage in a 43°C constant temperature bath for a while after preparation, respectively. Each polishing rate was calculated from the thickness of the wafer before and after the polishing, and on the basis of degree of lowering of the polishing rate of each first polishing composition due to the storage, the stability of the second polishing compositions in accordance with Examples 32 to 72 and Comparative Examples 12 to 26 was evaluated based on four levels: Excellent (○)(⊕), Good (○)(⊙), Pass (Δ) and Poor (×). Namely, a case where the polishing rate provided by the second polishing composition after storage for two months or more was larger than 90% of the polishing rate provided by the second polishing composition immediately after preparation was evaluated as Excellent, a case where the polishing rate provided by the second polishing composition after storage for not less than one month and less than two months was less than 90% of the polishing rate provided by the second polishing composition immediately after preparation was evaluated as Good, a case where the polishing rate provided by the second polishing composition after storage for not less than one week and less than one month was less than 90% of the polishing rate provided by the second polishing composition immediately after preparation was evaluated as Pass, and a case where the polishing rate provided by the second polishing composition after storage for less than one week was less than 90% of the polishing rate provided by the second polishing composition immediately after preparation was evaluated as Poor. The results of the evaluation are shown in the column entitled "Stability" of Table 3 to Table 5.

Please amend Table 3 on page 43 as follows:

Table 3

	Colloidal silica or silicon oxide instead thereof (Mass percentage)		Acid (Mass percentage)	Anticorrosive (Mass percentage)	PVA or compound instead thereof (Mass percentage)	Oxidizing agent (Mass percentage)	p H	Surface difference in level	Cleaning property	Surface defect	Stability	Stock removal rate (nm/min.)				
												Cu blanket wafer	Ta blanket wafer	TaN blanket wafer	SiO <sub>2</sub> blanket wafer	etching wafer
Ex. 32	-	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>00B</u>	<u>00B</u>	<u>00B</u>	<u>00B</u>	80	45	60	6	10
Ex. 33	CS1 2%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>00B</u>	<u>00B</u>	<u>00B</u>	<u>00B</u>	90	50	70	40	25
Ex. 34	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>00B</u>	<u>00B</u>	<u>00B</u>	<u>00B</u>	100	60	100	60	35
Ex. 35	CS1 7%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>00B</u>	<u>00B</u>	<u>00B</u>	○	100	60	100	70	50
Ex. 36	CS1 10%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>00B</u>	<u>00B</u>	<u>00B</u>	○	120	80	130	90	70
Ex. 37	CS1 5%	-	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	○	<u>00B</u>	<u>00B</u>	<u>00B</u>	80	30	50	60	35
Ex. 38	CS1 5%	CS3 1%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>00B</u>	<u>00B</u>	<u>00B</u>	<u>00B</u>	90	50	70	60	35
Ex. 39	CS1 5%	CS3 4%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>00B</u>	<u>00B</u>	<u>00B</u>	○	100	80	120	70	45
Ex. 40	CS1 5%	CS3 7%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>00B</u>	<u>00B</u>	<u>00B</u>	<u>AB</u>	100	80	120	70	45
Ex. 41	CS1 7%	-	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	○	<u>00B</u>	<u>00B</u>	<u>00B</u>	100	35	55	70	50
Ex. 42	CS1 6%	CS3 1%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>00B</u>	<u>00B</u>	<u>00B</u>	<u>00B</u>	100	50	70	65	40
Ex. 43	CS1	CS3	NA	H	PVA <sup>+1</sup>	H <sub>2</sub> O <sub>2</sub>	2.3	<u>00B</u>	<u>00B</u>	<u>00B</u>	<u>00B</u>	100	60	100	55	35



	4%	3%	0.06%	0.05%	0.1%	1%										
Ex. 44	CS1 3%	CS3 4%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>□□□</u>	<u>□□□</u>	<u>□□□</u>	○	90	70	110	50	35
Ex. 45	CS1 2%	CS3 5%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>□□□</u>	<u>□□□</u>	<u>□□□</u>	○	90	70	110	40	30
Ex. 46	-	CS3 7%	NA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>□□□</u>	<u>□□□</u>	<u>□□□</u>	○	90	70	110	20	20
Ex. 47	CS1 5%	CS3 2%	NA 0.005%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	5.5	○	○	○	<u>□□□</u>	100	10	15	60	35
Ex. 48	CS1 5%	CS3 2%	NA 0.03%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	3.5	○	○	<u>□□□</u>	<u>□□□</u>	100	30	45	60	35
Ex. 49	CS1 5%	CS3 2%	NA 0.1%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	1.8	<u>□□□</u>	<u>□□□</u>	○	<u>□□□</u>	100	55	90	60	35
Ex. 50	CS1 5%	CS3 2%	NA 1.0%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	1.2	○	<u>□□□</u>	<u>△□</u>	<u>□□□</u>	100	45	70	60	35
Ex. 51	CS1 5%	CS3 2%	LA 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	4	○	<u>□□□</u>	<u>□□□</u>	<u>△□</u>	100	40	70	60	35
Ex. 52	CS1 5%	CS3 2%	Cit 0.06%	H 0.05%	PVA <sup>+1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.6	○	<u>□□□</u>	<u>□□□</u>	<u>△□</u>	100	40	70	60	35

Please amend Table 4 on page 44 as follows:

Table 4

	Colloidal silica or silicon oxide instead thereof (Mass percentage)		Acid (Mass percentage)	Anticorrosive (Mass percentage)	PVA or compound instead thereof (Mass percentage)	Oxidizing agent (Mass percentage)	p H	Surface difference in level	Cleaning property	Surface defect	Stability	Stock removal rate (nm/min.)				
												Cu blanket wafer	Ta blanket wafer	TaN blanket wafer	SiO <sub>2</sub> blanket wafer	etch-resistant wafer
Ex. 53	CS1 5%	CS3 2%	Oxa 0.06%	H 0.05%	PVA <sup>41</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.6	○	<u>○○</u> □	<u>○○</u> □	<u>△</u> □	50	50	70	60	10
Ex. 54	CS1 5%	CS3 2%	NA 0.06%	H 0.001%	PVA <sup>41</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	○	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	130	65	110	60	35
Ex. 55	CS1 5%	CS3 2%	NA 0.06%	H 0.01%	PVA <sup>41</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	○	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	120	65	110	60	35
Ex. 56	CS1 5%	CS3 2%	NA 0.06%	H 0.1%	PVA <sup>41</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	100	60	100	60	35
Ex. 57	CS1 5%	CS3 2%	NA 0.06%	H 0.5%	PVA <sup>41</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	90	55	90	60	35
Ex. 58	CS1 5%	CS3 2%	NA 0.06%	G 0.05%	PVA <sup>41</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	○	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	130	65	110	60	35
Ex. 59	CS1 5%	CS3 2%	NA 0.06%	J 0.05%	PVA <sup>41</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	100	60	100	60	35
Ex. 60	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>41</sup> 0.005%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	○	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	30	80	120	60	35
Ex. 61	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>41</sup> 0.01%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	65	80	120	60	35
Ex. 62	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>41</sup> 0.05%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	100	60	100	60	35
Ex. 63	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>41</sup> 0.5%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	○	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	150	50	80	40	50
Ex. 64	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>42</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	100	75	95	55	20
Ex. 65	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>43</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	<u>○○</u> □	100	70	95	55	30

Ex. 66	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>*9</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	65	100	55	30
Ex. 67	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>*1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	90	60	100	60	30
Ex. 68	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>*1</sup> 0.1%	-	2.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	25	40	20	50	35
Ex. 69	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>*1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 0.1%	2.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30	40	30	60	35
Ex. 70	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>*1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 0.5%	2.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	60	60	80	60	35
Ex. 71	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>*1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 2%	2.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	120	55	80	50	30
Ex. 72	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>*1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 5%	2.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	50	70	40	20

Please amend Table 5 on page 45 as follows:

Table 5

C.Ex.	Colloidal silica or silicon oxide instead thereof (Mass percentage)		Acid (Mass percentage)		Anticorrosive (Mass percentage) PVA or compound instead thereof (Mass percentage)	Oxidizing agent (Mass percentage)	pH	Surface difference in level	Cleaning property	Surface defect	Stability	Stock removal rate (nm/min.)				
												Cu blanket wafer	Ta blanket wafer	Ta <sub>2</sub> N <sub>5</sub> blanket wafer	SiO <sub>2</sub> blanket wafer	black diamond $\pi$ -mask wafer
C.Ex. 12	-	-	NA 0.06%	H 0.05%	PVA <sup>*1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	×	○	<input type="checkbox"/>	<input type="checkbox"/>	10	5	5	0	0
C.Ex. 13	FS1 5%	FS3 2%	NA 0.06%	H 0.05%	PVA <sup>*1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	×	○	<input type="checkbox"/>	<input type="checkbox"/>	100	60	100	120	50
C.Ex. 14	FS4 7%	-	NA 0.06%	H 0.05%	PVA <sup>*1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	×	○	<input type="checkbox"/>	<input type="checkbox"/>	100	60	100	120	50
C.Ex.	CS1	CS3	-	H	PVA <sup>*1</sup>	H <sub>2</sub> O <sub>2</sub>	6.7	×	<input type="checkbox"/>	<input type="checkbox"/>	○	10	20	30	30	15

15	5%	2%		0.05%	0.1%	1%											
C.Ex. 16	CS1 5%	CS3 2%	NA 0.06%	-	PVA <sup>*1</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	×	<u>○</u> <u>○</u> <u>⊖</u>	<u>○</u> <u>○</u> <u>⊖</u>	<u>○</u> <u>○</u> <u>⊖</u>	110	70	110	60	35	
C.Ex. 17	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	-	H <sub>2</sub> O <sub>2</sub> 1%	2.3	×	<u>○</u> <u>○</u> <u>⊖</u>	<u>○</u> <u>○</u> <u>⊖</u>	<u>○</u> <u>○</u> <u>⊖</u>	30	70	110	60	10	
C.Ex. 18	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>*5</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	×	○	<u>△</u> <u>⊖</u>	×	85	25	45	10	45	
C.Ex. 19	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>*5</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	×	○	<u>△</u> <u>⊖</u>	×	90	25	45	10	45	
C.Ex. 20	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>*6</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	×	○	<u>△</u> <u>⊖</u>	×	90	20	40	7	45	
C.Ex. 21	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	PVA <sup>*7</sup> 0.1%	H <sub>2</sub> O <sub>2</sub> 1%	2.3	×	○	<u>△</u> <u>⊖</u>	×	90	20	40	5	40	
C.Ex. 22	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	A	H <sub>2</sub> O <sub>2</sub> 1%	2.3	×	×	×	×	5	5	5	5	5	
C.Ex. 23	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	B	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>△</u> <u>⊖</u>	<u>○</u> <u>○</u> <u>⊖</u>	○	<u>○</u> <u>○</u> <u>⊖</u>	50	60	100	50	10	
C.Ex. 24	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	C	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>△</u> <u>⊖</u>	<u>○</u> <u>○</u> <u>⊖</u>	○	<u>○</u> <u>○</u> <u>⊖</u>	50	40	80	40	10	
C.Ex. 25	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	D	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>△</u> <u>⊖</u>	<u>○</u> <u>○</u> <u>⊖</u>	○	<u>○</u> <u>○</u> <u>⊖</u>	50	50	70	60	10	
C.Ex. 26	CS1 5%	CS3 2%	NA 0.06%	H 0.05%	E	H <sub>2</sub> O <sub>2</sub> 1%	2.3	<u>△</u> <u>⊖</u>	<u>○</u> <u>○</u> <u>⊖</u>	○	<u>○</u> <u>○</u> <u>⊖</u>	60	50	90	50	10	

Please amend the paragraph beginning at line 10 on page 46 as follows:

In the column entitled “PVA or compound instead thereof” of Table 3 to Table 5,  
PVA<sup>\*1</sup> is a ~~completely saponified~~ polyvinyl alcohol having a molecular weight of 100,000 and a saponification degree of not less than 98%,  
PVA<sup>\*2</sup> is a ~~completely saponified~~ polyvinyl alcohol having a molecular weight of 10,000 and a saponification degree of not less than 98%,  
PVA<sup>\*3</sup> is a ~~completely saponified~~ polyvinyl alcohol having a molecular weight of 20,000 and a

saponification degree of not less than 98%,

PVA<sup>\*4</sup> is a ~~completely saponified~~ polyvinyl alcohol having a molecular weight of 60,000 and a saponification degree of not less than 98%,

PVA<sup>\*5</sup> is a partially saponified polyvinyl alcohol having a molecular weight of 100,000 and a saponification degree of not less than 88%,

PVA<sup>\*6</sup> is a partially saponified polyvinyl alcohol having a molecular weight of 20,000 and a saponification degree of not less than 88%,

PVA<sup>\*7</sup> is a partially saponified polyvinyl alcohol having a molecular weight of 60,000 and a saponification degree of not less than 88%,

A is polyethylene glycol,

B is polyacrylic acid,

C is ammonium lauryl sulfate,

D is polyoxyethylene polyoxypropylene alkyl ether, and

E is ammonium dodecylbenzenesulfonate.

**Please amend the paragraph beginning at line 34 on page 46 as follows:**

As shown in Table 3 to Table 5, in Examples 32 to 72, the evaluation with respect to the surface difference levels was good. Among others, in Example 56 and Example 57 where the content of the anticorrosive was from 0.1 to 0.5% by mass, the evaluation with respect to surface difference levels was particularly good. When the object to be polished was a copper blanket wafer, the second polishing compositions in accordance with Example 62 and Example 63 had high polishing rates in comparison with the second polishing compositions in accordance with Example 60 and Example 61. These results suggest that the second polishing composition having a content of completely saponified polyvinyl alcohol content having a saponification degree of 98.0% by mole or more of 0.05 to 0.5% by mass had ability for polishing the copper-containing metal. When the object to be polished was a copper blanket wafer, the second polishing compositions in accordance with Example 71 and Example 72 had high polishing rates in comparison with the second polishing compositions in accordance with Examples 68 to 70. These results suggest that the second polishing composition having an oxidizing agent content of

2 to 5% by mass had ability for polishing the copper-containing metal.

**Please amend the paragraph beginning at line 31 on page 47 as follows:**

A copper patterned wafer was polished by using a polishing slurry, "PLANERLITE-7102", available from FUJIMI INCORPORATED under the aforementioned second polishing conditions. The copper patterned wafer was a copper patterned wafer with a 1000 nm thick copper layer (854 mask pattern) available from SEMTECH SEMATECH Co. Ltd., and had an initial recess 16 of 800 nm depth. The polishing was terminated at the time when the thickness of the copper layer of the copper patterned wafer after polishing was 70% of the thickness of the copper layer of the copper patterned wafer before polishing. This process corresponds to the chemical mechanical polishing process of the first sub step in the first polishing step. Next, the copper patterned wafer after being subjected to the chemical mechanical polishing process of the first sub step was polished by using each of the first polishing compositions in accordance with Examples 73 to 105 and Comparative Examples 27 to 42 under the first polishing conditions. The barrier layer 14 thus polished, the upper surface of which was detected to expose itself by an indicating endpoint, was additionally polished for another period of time necessary to polish out a 200 nm thick copper layer, followed by finishing of the polishing. This process corresponds to the chemical mechanical polishing process of the second sub step in the first polishing step. Thereafter, a region with a 100  $\mu\text{m}$  wide wiring 17 formed was measured by using a contact type surface measuring apparatus of profiler, "HRP340", available from KLA Tencor-Tencor Co. The results of the measurement are shown in the column entitled "Depth of dishing" of Table 6 and Table 7. In the column, "-" (hyphen) represents the fact that a depth of dishing could not be measured because the wafer was not polished.

**Please amend the paragraph beginning at line 18 on page 48 as follows:**

With respect to the copper patterned wafer subjected to the chemical mechanical polishing processes of the first sub step and the second sub step, the amount of copper-containing metal left on the region of the insulating layer 12 with no wiring 17 formed was measured. The amount of the copper-containing metal left was measured by using a differential interference microscope, "OPTIPHOTO300", available from NIKON Co. Ltd. On the basis of the thus measured amount of the copper-containing metal left, each of the first polishing compositions in accordance with Examples 73 to 105 and Comparative Examples 27 to 42 was evaluated based on four levels: Excellent (⊙)(≡), Good (⊙)(Θ), Pass (Δ) and Poor (×). Namely, a case where no copper-containing metal was found left was evaluated as Excellent, a case where copper-containing metal was slightly left was evaluated as Good, a case where spotted copper-containing metal was found left throughout was evaluated as Pass, and a case where too large an amount of the copper-containing metal was found left to confirm wiring was evaluated as Poor. The results of the evaluation are shown in the column entitled "Amount of copper-containing metal left" of Table 6 and Table 7.

**Please amend the paragraph beginning at line 33 on page 48 as follows:**

The copper blanket wafers were polished under the first polishing conditions by using the first polishing compositions in accordance with Examples 73 to 105 and Comparative Examples 27 to 42 immediately after preparation and the first polishing compositions in accordance with Examples 73 to 105 and Comparative Examples 27 to 42 after storage in a closed container for a while after preparation, respectively. Each polishing rate was calculated from the thicknesses of the wafers before and after the polishing, and on the basis of degree of lowering of polishing rate due to storage of each first polishing composition, the pot life of each of the first polishing compositions in accordance with Examples 73 to 105 and Comparative Examples 27 to 42 was evaluated based on four levels: Excellent (⊙)(≡), Good (⊙)(Θ), Pass (Δ) and Poor (×). Namely, a case where the polishing rate provided by the first polishing composition stored for two weeks or more was greater than 90% of the polishing rate provided by the first polishing composition immediately after preparation was evaluated as Excellent, a case where the polishing rate provided by the first polishing composition stored for one week or more and less than two weeks was less

than 90% of the polishing rate provided by the first polishing composition immediately after preparation was evaluated as Good, a case where the polishing rate provided by the first polishing composition stored for three days or more and less than one week was less than 90% of the polishing rate provided by the first polishing composition immediately after preparation was evaluated as Pass, and a case where the polishing rate provided by the first polishing composition stored for less than three days was less than 90% of the polishing rate provided by the first polishing composition immediately after preparation was evaluated as Poor. The results of the evaluation are shown in the column entitled "Pot life" of Table 6 and Table 7.

**Please amend Table 6 on page 50 as follows:**

Table 6

	u-ximmo-actur or polishing accelerator instead thereof (Mass percentage)	Benzotriazole derivative or anticorrosive instead thereof (Mass percentage)	Silicon oxide (Mass percentage)	Surfactant (Mass percentage)		Oxidizing agent (Mass percentage)	pH	Stock removal rate (nm/min.)	Depth of etching (nm)	Amount of copper-containing metal left	Pot life
				A1	D						
Ex. 73	Ala 0.01%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	1000	100	○	△≡
Ex. 74	Ala 0.5%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	800	60	○	△≡
Ex. 75	Ala 1%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	600	20	○	△≡
Ex. 76	Ala 1.5%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	400	20	○	△≡
Ex. 77	Ala 2%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	200	15	△≡	△≡
Ex. 78	Ala 1%	G 0.001%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	800	100	○	△≡



Ex. 79	Ala 1%	G 0.005%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	700	70	○	<u>△</u> ⊖
Ex. 80	Ala 1%	G 0.02%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	300	15	<u>△</u> ⊖	<u>△</u> ⊖
Ex. 81	Gly 1%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	800	50	○	<u>△</u> ⊖
Ex. 82	Val 1%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	400	15	<u>△</u> ⊖	<u>△</u> ⊖
Ex. 83	Ala 1%	 0.0001%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	800	100	○	<u>△</u> ⊖
Ex. 84	Ala 1%	 0.0005%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	600	20	○	<u>△</u> ⊖
Ex. 85	Ala 1%	 0.001%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	300	15	<u>△</u> ⊖	<u>△</u> ⊖
Ex. 86	Ala 1%	 0.001%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	800	100	○	<u>△</u> ⊖
Ex. 87	Ala 1%	 0.005%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	600	20	○	<u>△</u> ⊖
Ex. 88	Ala 1%	 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	300	15	<u>△</u> ⊖	<u>△</u> ⊖
Ex. 89	Gly 1%	 0.0005%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	800	50	○	<u>△</u> ⊖
Ex. 90	Val 1%	 0.0005%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	400	15	<u>△</u> ⊖	<u>△</u> ⊖
Ex. 91	Gly 1%	 0.005%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	800	50	○	<u>△</u> ⊖
Ex. 92	Val 1%	 0.005%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	400	15	<u>△</u> ⊖	<u>△</u> ⊖
Ex. 93	Ala 1%	G 0.01%	CS2 0.5%	A2 0.02%	D 0.015%	APS 1%	9.5	600	20	○	<u>△</u> ⊖
Ex. 94	Ala 1%	G 0.01%	CS2 0.5%	A3 0.02%	D 0.015%	APS 1%	9.5	600	20	○	<u>△</u> ⊖
Ex. 95	Ala 1%	G 0.01%	CS2 0.5%	B1 0.02%	D 0.015%	APS 1%	9.5	400	40	○	○

Ex. 96	Ala 1%	G 0.01%	CS2 0.5%	B2 0.02%	D 0.015%	APS 1%	9.5	800	100	○○□	△□
Ex. 97	Ala 1%	G 0.01%	CS2 0.5%	C1 0.02%	D 0.015%	APS 1%	9.5	800	100	○	△□

Please amend Table 7 on page 51 as follows:

Table 7

	α-amino acid or poisoning accelerator instead thereof (Mass percentage)	Benzoic acid derivative or antioxidant instead thereof (Mass percentage)	Silicon oxide (Mass percentage)	Surfactant (Mass percentage)		Oxidizing agent (Mass percentage)	pH	Stock removal rate (nm/min.)	Depth of etching (nm)	Amount of copper-containing metal left	Pot life
Ex. 98	Ala 1%	G 0.01%	CS2 0.5%	C2 0.02%	D 0.015%	APS 1%	9.5	800	100	○	△□
Ex. 99	Ala 1%	G 0.01%	CS2 0.5%	A1 0.035%	-	APS 1%	9.5	450	20	○	△□
Ex. 100	Ala 1%	G 0.01%	CS2 0.5%	A1 0.02%	E 0.015%	APS 1%	9.5	700	50	○	△□
Ex. 101	Ala 1%	G 0.01%	CS2 0.5%	B2 0.02%	E 0.015%	APS 1%	9.5	800	100	○○□	△□
Ex. 102	Ala 1%	G 0.01%	CS1 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	550	15	△□	△□
Ex. 103	Ala 1%	G 0.01%	CS3 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	650	50	△□	△□
Ex. 104	Ala 1%	G 0.01%	FS3 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	600	45	○	△□
Ex. 105	Ala 1%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	HPO 1%	9.5	300	100	○	○

C.Ex. 27	-	-	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	100	-	×	<u>△</u> ≡
C.Ex. 28	-	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	300	200	○	<u>△</u> ≡
C.Ex. 29	-	0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	10	-	×	<u>△</u> ≡
C.Ex. 30	Ala 1%	-	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	900	450	<u>○○</u> ≡	<u>△</u> ≡
C.Ex. 31	Gly 1%	-	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	1100	450	<u>○○</u> ≡	<u>△</u> ≡
C.Ex. 32	Ala 1%	0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	10	-	×	<u>△</u> ≡
C.Ex. 33	Gly 1%	0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	20	-	×	<u>△</u> ≡
C.Ex. 34	Ala 1%	G 0.01%	CS2 0.5%	-	-	APS 1%	9.5	1000	250	○	<u>△</u> ≡
C.Ex. 35	Gly 1%	0.01%	CS2 0.5%	-	-	APS 1%	9.5	1200	300	○	<u>△</u> ≡
C.Ex. 36	Ala 1%	G 0.01%	-	A1 0.02%	D 0.015%	APS 1%	9.5	40	-	×	<u>△</u> ≡
C.Ex. 37	Ala 1%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	-	9.5	20	-	×	<u>○○</u> ≡
C.Ex. 38	Cit 1%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	900	120	○	<u>△</u> ≡
C.Ex. 39	LA 1%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	90	150	○	<u>△</u> ≡
C.Ex. 40	Oxa 1%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	400	120	○	<u>△</u> ≡
C.Ex. 41	NA 1%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	100	150	○	<u>△</u> ≡
C.Ex. 42	SA 1%	G 0.01%	CS2 0.5%	A1 0.02%	D 0.015%	APS 1%	9.5	120	150	○	<u>△</u> ≡

Please amend the paragraph beginning at line 15 on page 53 as follows:

A copper patterned wafer (854 mask pattern) available from SEMTECH SEMATECH Co. Ltd. was polished by using a polishing slurry, "PLANERLITE-7102", available from FUJIMI INCORPORATED under the aforementioned second polishing conditions. This process corresponds to the chemical mechanical polishing process of the first sub step in the first polishing step. Next, the copper patterned wafer was polished by using the first polishing composition in accordance with Example 75 under the aforementioned first polishing conditions. This process corresponds to the chemical mechanical polishing process of the second sub step in the first polishing step. Subsequently, the copper patterned wafer subjected to the chemical mechanical polishing process of the second sub step was polished by using each of the second polishing compositions in accordance with Examples 32 to 72 and Comparative Examples 12 to 26 under the third polishing conditions. This process corresponds to the chemical mechanical polishing process of the second sub step in the second polishing step. At the end of the second sub step and the end of the second polishing step, a region with 100  $\mu\text{m}$  wiring 17 formed was measured for the depth of dishing. A difference was calculated by measuring the depth of dishing measured at the end of the second polishing step from the depth of dishing measured at the end of the second sub step. The amount of the calculated difference was approximately the same as the amount of calculated difference when the first polishing composition in accordance with Example 2 was used instead of the first polishing composition in accordance with Example 75 in the chemical polishing process of the second sub step.